

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

- 1) A method of controlling the presentation of content, the method including, in a processing system:
 - (a) Presenting content to a user in accordance with a content definition; and,
 - (b) Causing the content definition to be modified to thereby selectively modify content to be presented.
- 5 2) A method according to claim 1, wherein the content definition includes at least one of:
 - (a) A content network; and,
 - (b) A content indication.
- 3) A method according to claim 1 or claim 2, wherein the method includes:
 - 10 (a) Determining if a respective modification results in the respective content being more successful at meeting predefined objectives; and,
 - (b) Increasing the frequency of presentation of the respective content in response to a successful determination.
- 4) A method according to any one of the claims 1 to 3, wherein the content definition includes a content network having a number of nodes interconnected via a number of links, the links being used to define the content to be presented, and wherein the method includes modifying the content definition by modifying weightings associated with one or more of the links.
- 15 5) A method according to any one of the claims 1 to 4, wherein the content definition includes a content indication having a number of parameters used to define the content to be presented, wherein the method includes modifying the content definition by modifying the parameters.
- 20 6) A method according to claim 5, wherein the method includes modifying the parameters in accordance with weightings, the weightings being indicative of the ability of content defined by the parameters to meet predetermined objectives.
- 7) A method according to any one of the claims 1 to 6, wherein the method includes presenting content in accordance with input commands from the user.
- 25 8) A method according to claim 7, wherein the commands include an indication of the selection of content to be presented.
- 9) A method according to any one of the claims 1 to 8, wherein the method includes modifying the content definition at least one of:
 - 30 (a) Randomly;
 - (b) In accordance with user responses; and,
 - (c) So as to increase the likelihood of the presented content meeting predefined objectives.
- 10) A method according to any one of the claims 1 to 9, wherein the method includes iteratively modifying the content presented over time.
- 35 11) A system for controlling the presentation of content, the system including a processing system for:
 - (a) Presenting content to a user in accordance with a content definition; and,

- (b) Selectively modifying the content definition to thereby selectively modify content to be presented.

12) A system according to claim 11, wherein the system performs the method of any one of the claims 1 to 11.

5 13) A method of controlling the presentation of content instances using a processing system, the method including causing the processing system to:

- (a) Present one or more content instances to the user in accordance with a content network;
- (b) Determine one or more responses provided by the user in response to the presentation of the content instance;
- 10 (c) Evaluate the one or more responses in accordance with predetermined criteria; and,
- (d) Modify the content network in accordance with the results of the evaluation.

14) A method according to claim 13, the predetermined criteria representing predefined objectives, the method including causing the processing system to evaluate the responses to thereby determine the ability of the one or more presented content instances to satisfy predefined objectives.

15 15) A method according to claim 14, the method including repeatedly modifying the content network such that content instances that are determined to be more able to satisfy the predetermined objectives are presented.

16) A method according to claim 14 or claim 15, the method including modifying the content network iteratively to thereby optimise the content network such that the ability of the content network to satisfy the predetermined objectives is improved.

20 17) A method according to any one of the claims 13 to 16, the content network including:

- (a) An indication of a number of presentation instances, each presentation instance being associated with one or more content instances, and each content instance being associated with a number of presentation instances;
- (b) One or more links for connecting each presentation instance to a subsequent presentation instance; and,
- 25 (c) A weighting associated with each link.

18) A method according to claim 17, the method including causing the processing system to modify the content network by modifying the weightings in accordance with the responses.

30 19) A method according to claim 18, the method including repeatedly modifying the weightings in accordance with determined responses to thereby modify the weightings of links according to how well they satisfy the predetermined objectives.

20) A method according to any one of the claims 17 to 19, the method including causing the processing system to present the content instances by:

- 35 (a) Presenting one or more of the content instances associated with a respective presentation instance;

- (b) Selecting a link in accordance with the one or more responses, the link connecting the respective presentation instance to a subsequent presentation instance;
- (c) Presenting the one or more content instances associated with the subsequent presentation instance; and,
- 5 (d) Repeating steps (b) and (c) as required.

21) A method according to claim 20, at least one of the responses including a request, the method including causing the processing system to select a link in accordance with the request.

22) A method according to claim 21, each presentation instance including one or more request options, each request option having one or more links associated therewith, the method including causing the 10 processing system to:

- (a) Determine the request from the one or more responses;
- (b) Select a request option corresponding to the request; and,
- (c) Select one of the links associated with the selected request option.

23) A method according to any one of the claims 20 to 22, the method including causing the processing 15 system to modify the weightings of selected links by:

- (a) Determining the one or more responses to the presentation of the one or more content instances associated with a respective presentation instance; and,
- (b) Modifying the weighting of each link selected prior to the content instances being presented in accordance with the determined response.

20 24) A method according to any one of the claims 20 to 23, the method including causing the processing system to modify the content network by modifying the links, the modifications including at least one of:

- (a) Removing a respective link;
- (b) Creating a new link; and,
- 25 (c) Moving a link from one presentation instance to another presentation instance.

25) A method according to claim 24, the method including causing the processing system to compare one or more of the weightings to a predetermined threshold and perform the modification in accordance with the results of the comparison.

26) A method according to claim 25, the predetermined threshold being determined in accordance with 30 the weighting of other links in the content network.

27) A method according to claim 24 or claim 25, the method including causing the processing system to create a new link if at least one of:

- (a) The weighting of one or more existing links falls below a lower threshold;
- (b) A rating of one or more content instances or presentation instances falls below a lower threshold;
- 35 and,
- (c) The weighting of one or more existing links is above an upper threshold; and,
- (d) A rating of one or more content instances or presentation instance is above an upper threshold.

28) A method according to any of one of the claims 25 to 27, the method including causing the processing system to remove a link if at least one of:

- The weighting of the link falls below a lower threshold; and,
- One of the presentation instances to which the link is associated is removed.

5 29) A method according to any one of the claims 20 to 28, the method including causing the processing system to update the content network by:

- Determining one or more new presentation instances; and,
- Create one or more links associated with each new presentation instance, the links linking each new presentation instance to one or more existing or other new presentation instances.

10 30) A method according to claim 29, the method including determining the new presentation instances in accordance with ratings associated with each content instance or each presentation instance.

31) A method according to any one of the claims 20 to 30, the method including causing the processing system to:

- Determine the one or more content instances associated with a respective presentation instance;
- Select one or more of the content instances; and,
- Present the one or more selected content instances.

15 32) A method according to any one of the claims 20 to 31, the method including causing the processing system to:

- Determine a weighting for each content instance associated with the presentation instance; and,
- Select the one or more content instances associated with the presentation instance in accordance with the determined weighting.

20 33) A method according to any one of the claims 20 to 32, each presentation instance having one or more content instance criteria associated therewith, the method including causing the processing system to:

- Determine the one or more content instance criteria; and,
- Select one or more content instances in accordance with the content instance criteria.

25 34) A method according to any one of the claims 20 to 33, one or more of the content instances, the presentation instances or the links including predetermined instructions, the method including causing the processing system to:

- Determine the instructions; and,
- Present one or more content instances in accordance with the instructions.

30 35) A method according to claim 34, the instructions including references to one or more content instances, the method including causing the processing system to:

- Select the one or more content instances in accordance with the instructions; and,
- Present the one or more content instances.

35 36) A method according to any of the claims 31 to 35, the method including selecting the one or more content instances in accordance with at least one of:

- A content instance rating;

- (b) A content instance weighting;
- (c) A content instance type, each content instance having an associated type determined in accordance with the nature of content contained therein; and,
- (d) Descriptive data (structured or unstructured) pertaining to the content instance's relationship to other content instances.

5 37) A method according to any of the claims 13 to 36, each content instance, presentation instance, link or content instance combination having an associated rating, the method including causing the processing system to:

- (a) Evaluate each response in accordance with the predetermined criteria;
- 10 (b) Determine a rating modification in accordance with the results of the evaluation; and,
- (c) Apply the rating modification to the corresponding content instance, presentation instance, link or content instance combination upon which the response is based.

15 38) A method according to claim 37, the predetermined criteria including one or more criteria instances, each criteria instance including an indication of a respective rating modification, the method including causing the processing system to:

- (a) Evaluate each response in accordance with one or more selected criteria instances; and,
- (b) Determine the associated rating modification in accordance with the results of the evaluation.

39) A method according to any one of the claims 13 to 38, the content instances being stored in a store, the method including causing the processing system to:

- 20 (a) Receiving new content instances;
- (b) Storing the new content instances in the store; and,
- (c) Amending the content network in accordance with the new content instances.

40) A method according to any one of the claims 13 to 39, the method including causing the processing system to determine from the response at least one of:

- 25 (a) A rating provided in response to the presentation of the content instance, the rating being provided by the user;
- (b) An indication of the length of time the user spent observing the content instance; and,
- (c) An indication of whether the presentation of the content instance to the user caused a predetermined event.

30 41) A method according to any one of the claims 13 to 40, the one or more of the responses including a request, the method including causing the processing system to present further content instances in accordance with the determined requests.

42) A method according to any one of the claims 13 to 41, the processing system being coupled to an end station via a communications network, the method including causing the processing system to:

- 35 (a) Transfer content instance to be presented to the end station via the communications network, the end station being adapted to present the content instance to the user; and,
- (b) Receive a response generated by the end station via the communications network.

43) A method according to any one of the claims 13 to 42, the method being a method according to any one of the claims 1 to 10.

44) A method of controlling the presentation of content instances using a processing system, the method being substantially as hereinbefore described with reference to the accompanying drawings.

5 45) Apparatus for controlling the presentation of content instances, the apparatus including a processing system adapted to:

- (a) Present one or more content instances to the user in accordance with a content network;
- (b) Determine one or more responses provided by the user;
- (c) Evaluate the one or more responses in accordance with predetermined criteria; and,
- 10 (d) Modify the content network in accordance with the results of the evaluation.

46) Apparatus according to claim 32, the apparatus being adapted to perform the method of any one of the claims 1 to 43.

47) Apparatus for controlling the presentation of content instances, the apparatus being substantially as hereinbefore described.

15 48) A computer program product for controlling the presentation of content instances, the computer program product including computer executable code which when executed on a suitable processing system causes the processing system to perform the method of any one of the claims 1 to 43.

49) A method of controlling the presentation of content to a user using a processing system, the method including causing the processing system to:

20 (a) Receive a content indication representing content to be displayed;

- (b) Present the content in accordance with the content indication; and,
- (c) Selectively distributing the content indication to at least one of:

- (i) Other processing systems; and,
- (ii) Other users; and,

25 (d) Selectively modify the content indication prior to at least one of:

- (i) Presenting the content; and,
- (ii) Distributing the content.

50) A method according to claim 49, the content indication being the content, the method including selectively modifying the content indication by modifying the content.

30 51) A method according to claim 49, the content indication being a content specification defining the content to be presented, the method including selectively modifying the content indication by modifying the content specification to thereby modify the content presented.

52) A method according to claim 51, the content specification including a number of parameters defining the content to be presented, the method including:

35 (a) Modifying the content specification by modifying the parameters; and,

- (b) Presenting the content in accordance with the parameters.

53) A method according to claim 51 or claim 52, the content specification including a computer program or script, the method including causing the processing system to execute the computer program or script to thereby allow the content to be presented.

54) A method according to any one of the claims 51 to 53, the content specification being a URL, the method including causing the processing system to present the content as a web page.

55) A method according to any one of the claims 49 to 54, the content being a content collection, the content collection including one or more content instances.

56) A method according to claim 55, the content instances including at least one of:

10 (a) Images;

(b) Textual information;

(c) Audio information;

(d) Executable code;

(e) Display code;

(f) Data objects;

15 (g) Links to other content; and,

(h) Multimedia objects.

57) A method according to claim 55 or claim 56, the method including causing the processing system to present the content instances in accordance with a template, the template being determined in accordance with the content indication.

20 58) A method according to any one of the claims 55 to 57, the processing system being coupled to a store for storing a number of content instances, the method including:

(a) Obtaining one or more content instances from the store; and,

(b) Presenting the content including the obtained content instances.

(c) A method according to claim 49, the method including at least one of:

25 (d) Selecting one or more of the number of content instances in accordance with the parameters; and,

(e) Modifying one or more of the content instances in accordance with the parameters.

59) A method according to any one of the claims 49 to 58, the content being in the form of a web-page, the content indication being a URL, the method including causing the processing system to:

(a) Modify the URL; and,

30 (b) Using a re-direct process to present a web-page in accordance with modified URL.

60) A method according to any one of the claims 49 to 59, the method of modifying the content indication including:

(a) Transferring the content indication to the processing system using a form; and

(b) Causing the processing system to:

35 (c) Receive the form;

(d) Modify the content indication; and,

(e) Distribute the modified content indication.

- 61) A method according to claim 60, the form being an HTML form.
- 62) A method according to any one of the claims 49 to 61, the method including selectively modifying the content indication in accordance with predetermined mutation rules.
- 63) A method according to claim 62, the mutation rules defining at least one of:
 - 5 (a) Whether the content indication is to be modified; and,
 - (b) The nature of any modification to be performed.
- 64) A method according to claim 62 or claim 63, the method including causing the processing system to determine the mutation rules from at least one of:
 - (a) A store coupled to the processing system; and,
 - 10 (b) The content indication.
- 65) A method according to any one of the claims 62 to 64, the mutation rules including modifying the parameters:
 - (a) Randomly;
 - (b) By selecting alternative parameters from a predetermined list;
 - 15 (c) In accordance with input commands received from a user; and,
 - (d) By modifying the parameters in accordance with predetermined rules.
- 66) A method according to any one of the claims 49 to 65, the method including causing the processing system to:
 - (a) Maintain a log, the log indicating previous presentations of the respective content; and,
 - 20 (b) Modify the content indication in accordance with the respective log.
- 67) A method according to claim 66, the processing system including a store, the method including causing the processing system to maintain the log in the store.
- 68) A method according to claim 66 or claim 67, the method including causing the processing system to maintain the log in the content specification.
- 25 69) A method according to any one of the claims 49 to 68, the processing system including a base station coupled to one or more end stations via a communications network, the method including:
 - (a) Causing the end station to:
 - (i) Receive the content indication from another end station; and,
 - (ii) Transfer at least a portion of the content indication;
 - 30 (b) Causing the base station to:
 - (i) Receive the content indication portion from the end station;
 - (ii) Determine the content for presentation in accordance with the content indication portion;
 - (iii) Transfer the selected content to the end station via the communications network; and,
 - (c) Causing the end station to display the selected content.
- 35 70) A method according to claim 69, the method including causing the base station to modify the content indication portion.

71) A method according to claim 69 or claim 70, the content indication being a content specification, and the content indication portion being parameters included in the content specification.

72) A method according to any one of the claims 49 to 71, the method including causing the processing system to:

5 (a) Receive new content from user;

(b) Modify content indications to thereby cause the new content to be presented.

73) A method according to claim 72, the method including:

(a) Causing the end station to:

(i) Receive the new content from the user; and,

10 (ii) Forward the new content to the base station; and,

(b) Causing the base station to:

(i) Receive the new content;

(ii) Store the new content in a store; and,

15 (iii) Modify one or more content indications to thereby cause the new content to be displayed.

74) A method according to any one of the claims 49 to 73, the method including causing the processing system to:

(a) Receive input commands from a user; and,

20 (b) Define a user defined content indication in accordance with input commands, the user defined content indication being adapted to cause content selected by the user to be presented.

75) A method according to any one of the claims 49 to 74, the method including causing the processing system to:

(a) Provide an indication of available content;

25 (b) Allow the user to select available content in accordance with the available content indication; and,

(c) Generate a user defined content indication in accordance with the selected content, the user defined content indication being adapted to cause the selected content to be displayed.

76) A method according to claim 75, the method including causing the processing system to:

(a) Monitor the distribution of user defined content indications; and,

30 (b) Provide an indication of the distribution to one or more users.

77) A method according to claim 76, the method including causing the processing system to:

(a) Comparing the distribution of a number of user defined content indications or user-submitted content instances;

35 (b) Assess the relative success of the user defined content indications in accordance with the results of the comparison; and,

(c) Providing an indication of the relative success to one or more users.

78) A method according to any one of the claims 49 to 77, the method including distributing the content in accordance with input commands received from the user.

79) A method according to any one of the claims 49 to 78, the content including web pages, the web pages having one or more links to other web pages.

5 80) A method according to claim 79, the method including modifying the content by modifying the links.

81) A method according to claim 80, the method including:

(a) Monitoring the number of times each web page is viewed; and,

(b) Modifying the links in accordance with the relative number of times each page is viewed.

82) A method according to any one of the claims 49 to 81, the method being a method according to any 10 one of the claims 1 to 10 or 13 to 42.

83) Apparatus for controlling the presentation of content to a user, the apparatus including a processing system adapted to:

(a) Receive a content indication representing content to be displayed;

(b) Present the content in accordance with the content indication; and,

15 (c) Selectively distributing the content indication to at least one of:

(i) Other processing systems; and,

(ii) Other users; and,

(d) Selectively modify the content indication prior to at least one of:

(i) Presenting the content; and,

20 (ii) Distributing the content.

84) Apparatus according to claim 83, the apparatus being adapted to perform the method of any one of the claims 49 to 82.

85) A computer program product for controlling the presentation of content to a user, the computer program product including computer executable code which when executed on a suitable processing system causes the processing system to perform the method of any one of the claim 49 to 82.

25 86) A method according to any one of the claims 1 to 10, wherein the processing system selectively modifies the content definition.